ANOTHER PREVIOUSLY UNDESCRIBED FEMALE OF A NEARCTIC SPECIES OF *PARYDRA* (DIPTERA: EPHYDRIDAE)¹ ²

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ABSTRACT: The female of *Parydra (Chaetoapnaea) acuta* Clausen is described, illustrated, and an allotype designated. Also, the description of the male is modified and changes in existing keys for both males and females are made.

When the revision of the nearctic species of the tribe Parydrini (Clausen and Cook, 1971) was completed, four species of the genus *Parydra* were known solely from males. Later in Clausen (1977), this number was reduced to two species. Now, with the discoveries of the females of *Parydra acuta*, the females of only a single species remain to be described. Consequently, this paper should be considered as a supplement to Clausen and Cook (1971) and Clausen (1977).

In my original description of the males of *Parydra acuta*, I have only recently discovered an error in the calculation of the ratios of the costal section of the wing. Also, *Parydra acuta* was described from just two male specimens, and I since have seen five more. Therefore, with the error and discovery of more males, I am herein modifying the description of the males, describing the females, and correcting the existing keys for both.

Parydra (Chaetoapnaea) acuta Clausen

Diagnosis: Costal section of wing from R₁ to R₂₊₃ 1.3 to 1.7 times the distance from R₂₊₃ to R₄₊₅. Male with anterior ventral areas of tergites 3, 4 and 5 rounded or somewhat angled; gonites long, narrow and pointed, but not hooked at apex; aedeagus gradually tapering to a pointed apex. Female abdomen with sternites 6 through 8 much wider than other sternites; sternites 6, 7 and 8 all subequal in length.

Description: MALE. — As in Clausen and Cook, 1971, except wing with distance from h to R₁ 0.48 to 0.58 mm; R₂₊₃ to R₄₊₅ 0.51 to 0.61 mm; and costal section from R₁ to R₂₊₃ 1.3 to 1.6 times distance from R₂₊₃ to R₄₊₅.

FEMALE. – Total body length 2.38 to 2.72 mm; shining black with golden, coppery and grevish pruinosity. Head shining black with coppery pruinosity except where stated;

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length 0.65 to 0.71 mm; ocellar triangle raised; 3 round ocelli; ocellar setae large, divergent; interocellar and postocellar setae small, divergent; 2 large pairs of orbital setae; eyes red, oval; vertex with coppery pruinosity above, becoming golden below; 1 large pair of convergent, inner vertical setae; 1 large pair of divergent, exterior vertical setae; postorbitals and occipitals small; gena black with golden pruinosity, ground color with metallic blue or green reflections. Face shining black with golden to greyish pruinosity, ground color with metallic blue reflections; straight to concave when viewed in profile; facial depressions long, from antennal base to first parafacial seta; 1 large pair and 2 to 4 smaller pairs of parafacial setae. Clypeus with golden pruinosity; mouthparts with greyish pruinosity. Antennae dark brown to black with coppery pruinosity; arista black, plumose.

Thorax shining black with golden to coppery pruinosity; faint greyish stripes between dorsocentral and acrostichal setal rows; greyish to white spot at intrascutal suture; scutum length 0.71 to 0.78 mm; many long acrostichal setae; many long dorsocentral setae, with 1 pair larger at intrascutal suture; 1 long pair of prescutellar setae; humeral and posthumeral setae long and fine; presuturals long and fine, 1 pair longer; 2 large pairs of notopleurals, posterior pair larger; 1 large pair of posterior intraalar setae; pleura shining black with golden pruinosity above, becoming greyish below; 1 large pair of mesopleural setae; sternum with greyish pruinosity; katepisternal spine absent. Scutellum shining black with coppery pruinosity; length 0.31 to 0.37 mm; apical process small, pointed; apical and lateral tubercules absent; apical and lateral scutellar setae large. Legs black except trochanters and tarsi dark brown; legs with greyish pruinosity; prothoracic tibiae with long yellow setae at apex; mesothoracic tibiae each without a spur but with 1 or 2 large anterior setae at apex; apex of metathoracic tibiae with anterior cluster of brown setae and a brown, posterior comb. Wing clouded; darkened areas around crossveins bounded by white areas, sometimes appearing purplish; one white spot posterior to medial crossvein; no spot near middle of M₁₊₂; veins brown; length from humeral crossvein 2.11 to 2.18 mm; width 0.95 to 1.05 mm; distance from h to R₁ 0.54 to 0.61 mm; R_1 to R_{2+3} 0.95 to 1.02 mm; R_{2+3} to R_{4+5} 0.58 to 0.65 mm; R_{4+5} to M_{1+2} 0.27 to 0.34 mm; length of R_{4+5} 1.29 to 1.36 mm; length of M_{1+2} 0.61 to 0.68 mm; costal section from R₁ to R₂₊₃ 1.5 to 1.7 times distance from R₂₊₃ to R₄₊₅; halteres brownish yellow.

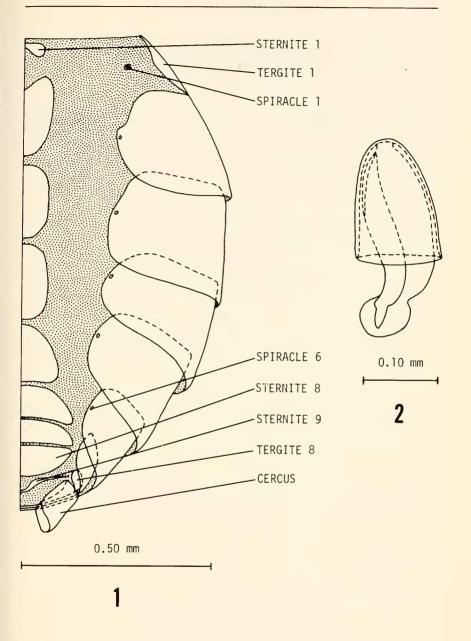
Abdomen as in Figure 1; shining black with golden pruinosity; setae rather long. Ventral receptacle as in Figure 2.

Distribution, Western Washington, near Mt. Rainier.

Specimens examined. 11 specimens (700 and 499). This species was described from the holotype and 10 paratype from Mt. Rainier, Washington (exact data in original description). Now, I have seen 5 more males and 4 females with the following data: 10, Washington, Pierce Co. Mt. Rainier N.P., West End Rd. nr. Payallup Riv., 3500 ft., VII-12-1977, R.S. Zack; 10, Washington, Pierce Co., Mt. Rainier N.P., Comet Falls Tr., above Christine Falls, 4500 ft., 13-VIII-77, W.J. Turner; and 300 and 499 Washington, Pierce Co., Mt. Rainier N.P., above Christine Falls, 3700 ft., VIII-(11-13)-1977, R.S. Zack, and one female of this series I am herein designating as the allotype. The allotype 9 and the 500 and 299 will be deposited in the collection of Washington State University, and 19 will be retained in the author's collection.

Key

The males of *Parydra acuta* cannot be keyed out using my original key (Clausen and Cook, 1971). In my original description of this species, the



Parydra acuta. Fig. 1 - Female Abdomen, Fig. 2 - Ventral receptacle.

costal section of the wing from R_1 to R_{2+3} was listed as being 0.6 to 0.8 times the distance from R_{2+3} to R_{4+5} , and this is an error. It should be 1.3 to 1.6 for males. Therefore all *acuta* males will key past couplet 30 to couplet 34, and then couplet 34 should be modified as follows:

The females of *Parydra acuta* will key to couplet 50 in Clausen and Cook (1971) and then to couplet 51 in Clausen (1977). Now, couplet 51 (Clausen, 1977) should be modified as follows:

- 51A Sternites 5 through 8 much wider than other sternites (Fig. 3; Clausen, 1977); ventral receptacle as in Fig. 4 (Clausen, 1977) spinosa Clausen Sternites 6 through 8 much wider than other sternites 51B
- Sternite 6 longer than 7, and 7 longer than 8 (Fig. 70; Clausen and Cook, 1971); ventral receptacle as in Fig. 138 (Clausen and Cook, 1971). . . . succurva Clausen Sternites 6, 7 and 8 all subequal in length (Fig. 1); ventral receptacle as in Fig. 2

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LITERATURE CITED

Clausen, P.J. and E.F. Cook. 1971. A revision of the nearctic species of the tribe Parydrini (Diptera: Ephydridae). Mem. American Ent. Soc. 27: 1-150.

Clausen, P.J. 1977. Heretofore undescribed females of two nearctic species of *Parydra* (Diptera: Ephydridae). Ent. News. 88 (5 & 6): 127-32.